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Measured versus Default Interstate Traffic Data in New Mexico, USA

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Abstract : This study investigates how the site specific traffic data differs from the Mechanistic Empirical Pavement Design Software default values. Two Weigh-in-Motion (WIM) stations were installed in Interstate-40 (I-40) and Interstate-25 (I-25) to developed site specific data. A computer program named WIM Data Analysis Software (WIMDAS) was developed using Microsoft C-Sharp (.Net) for quality checking and processing of raw WIM data. A complete year data from November 2013 to October 2014 was analyzed using the developed WIM Data Analysis Program. After that, the vehicle class distribution, directional distribution, lane distribution, monthly adjustment factor, hourly distribution, axle load spectra, average number of axle per vehicle, axle spacing, lateral wander distribution, and wheelbase distribution were calculated. Then a comparative study was done between measured data and AASHTOWare default values. It was found that the measured general traffic inputs for I-40 and I-25 significantly differ from the default values.

Keywords: AASHTOWare, traffic, weigh-in-motion, axle load distribution

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